

Date: Sun, 4 Sep 94 04:30:18 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: Bulk
Subject: Ham-Digital Digest V94 #294
To: Ham-Digital

Ham-Digital Digest Sun, 4 Sep 94 Volume 94 : Issue 294

Today's Topics:

9600 baud using Kenwood TM241A???
 Anyone know John Drum??????
 Detailed FSK Info
Off the shelf modems for packet?
 Packet Radio with apple LC ?
 PK-96 For Sale
 Small 1200 Baud packet modem
TAPR2 TNC Mods; Bit Regeneration?
 TNC-2 Source

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 2 Sep 1994 20:18:38 GMT
From: ihnp4.ucsd.edu!muninari.oz.au!comp.vuw.ac.nz!waikato!auckland.ac.nz!
comu2.auckland.ac.nz!root@network.ucsd.edu
Subject: 9600 baud using Kenwood TM241A???
To: ham-digital@ucsd.edu

While the questions are being bounced around, does anyone know
the details of the mods to make to a TM241A (2 metre) to make it
work with 9.6k? I'd like to stick one on my phone BBS and run
JNOS or something similar, but 1.2k is just too slow to contemplate....!

Thanks in advance,

Richard

Richard Vowles - r.vowles@auckland.ac.nz

Date: Fri, 2 Sep 1994 15:44:43 GMT
From: ihnp4.ucsd.edu!pacbell.com!uop!lll-winken.llnl.gov!overload.lbl.gov!agate!
spool.mu.edu!sdd.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!news1.boi.hp.com!
smt2@network.ucsd.edu
Subject: Anyone know John Drum??????
To: ham-digital@ucsd.edu

Looking for John, used to be stationed with him in Idaho.
Contact jhirn@hpbs3889.hp.boi.com

tnx, jon

Date: 3 Sep 1994 03:10:59 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!overload.lbl.gov!agate!darkstar.UCSC.EDU!
news.hal.COM!olivea!charnel.ecst.csuchico.edu!csusac!csus.edu!netcom.com!
ix.netcom.com!netnews@network.ucsd.edu
Subject: Detailed FSK Info
To: ham-digital@ucsd.edu

I'm looking for detailed information regarding HF digital signals.
I'm in the process of designing a modem and am frustrated at the
conflicting signal specifications uncovered during my search. At this
point, I am looking for signal parameters as opposed to protocols (but
they will be of interest soon).
The ARRL Handbook contains some of the details, but they are scattered
and incomplete. Can anyone suggest a reference?

Date: 2 Sep 1994 17:10:11 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!math.ohio-state.edu!jussieu.fr!
cea.fr!durbec5!parnoul@network.ucsd.edu
Subject: Off the shelf modems for packet?
To: ham-digital@ucsd.edu

In article 78185@blue.weeg.uiowa.edu, Henry Wertz <Henry@chop.isca.uiowa.edu> ()
writes:

> In note <dany.52.0010804C@arti.vub.ac.be>, dany@arti.vub.ac.be (Dany
> Vereertbrugghen) writes:
> >I was just wondering : wouldn't it be possible to use a normal
> >modem for packet radio. I don't know much about this, so ...?

> >Can someone point out the difficulties to me or give comments on
> >the idea?
> Unfortunately, no. Standard modems use a fixed set of frequencies that
> are okay for phone line use, but really suck for use over radio. There's also
> the electrical problem.. they expect to get a line all to themselves, and get
> a dialtone first 8-). Also, they would most closely match I guess a really
> fast RTTY mode. Ham radio uses packet (where the thing needs to pick up other
> stations and not rely so much on a carrier signal...) Fax modes, etc., which
> modems simply aren't set up to do. Oh yeah, my modem only allows like 2%
> (or is it even that much?) from the tones it is set up to detect.. packet
> radio stuff general expects a good amoun of drift and general crappy
> conditions. For ont much more than the cost of a 14.4K modem, you can get a
> 56Kbps packet controler, though. I don't a 56K controller'll do standard down
> to 45.5 baud RTTY though.. a TNC to do that can be gotten cheaply too.
>
> >dany@arti.vub.ac.be
>
>

Hmmm, I did that, I used a phone line Modem for Packet Radio operation, though
it was rather "off the drawer" than off the shelf ;-)

I built several years ago a phone modem kit based on the AM7910 chip, last year
as I heard about the Baycom software, I tought I could use my previous kit with
some adaptations...

The thing is that this kit was suited for 300 bds (V21) and 75/1200 bds (V23),
the French Minitel standard BTW. I had to surgeon somewhat the board to make
the modem chip operate in 1200 bds mode both receiving and transmitting. This
has been done by connecting the RTS input to the TX/RX signal.

It worked fine for several months, later I had the info that the chip could be
set to the "loopback" mode (thanks Pawel), making it receiving and transmitting
on the same set frequency set for analog test purpose.

Note that the V23 1200 mode is using 1300 Hz and 2100 Hz, this 800 Hz shift
is now recommended by TAPR when tuning a TNC2 kit for better spectrum
optimization.

I guess CCITT makes some studies on the choice of the frequency set for a given
standard, it's probably good to use it.

Recently I bought a PCB for the A&A Baycom modem kit, I refurbished my AM7910,
the whole thing is much smaller, and is QRV 300 bds on HF :-)

Well, all this is limited to 1200 bds at best, I know :-(

73 de f5hnk/Patrick

Date: Fri, 2 Sep 1994 00:43:24 GMT

From: agate!msuinfo!netnews.upenn.edu!feith1.FEITH.COM!kd3bj!bbsuser@ames.arpa
Subject: Packet Radio with apple LC ?
To: ham-digital@ucsd.edu

In checking with the fellow across the hall at work, who has a Mac LC, he confirms that my arrangement on the SE would be identical on his LC.

Good luck.

Bob, NX3S
Robert.Garland@kd3bj.ampr.org

--
Robert Garland

Date: 2 Sep 1994 08:36:13 -0600
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!gatech!udel!news.sprintlink.net!tracker.ramp.com!glock.ramp.com!not-for-mail@network.ucsd.edu
Subject: PK-96 For Sale
To: ham-digital@ucsd.edu

I have a nearly new AEA PK-96 1200/9600bps TNC for sale. It's a packet only box and will do 1200 and 9600 but only one at a time. It's nearly new...I haven't sent in the card yet. See the review in the Sept. QST for more details. There just isn't enough 9600 activity in my area to justify keeping it. Includes power and TNC-to-radio cables, manual, and original box and packing. Asking \$175 including UPS shipping to continental U.S. If interested please contact me via email.

Thanks and 73... Mark AA7TA email: markm@ramp.com

Date: Thu, 1 Sep 1994 18:36:53 GMT
From: news.cerf.net!gopher.sdsc.edu!news.tc.cornell.edu!news.cac.psu.edu!howland.reston.ans.net!vixen.cso.uiuc.edu!usenet.ucs.indiana.edu!indyvax.iupui.edu!jsissom.dmed.iupui.@ihnp4.ucsd.edu
Subject: Small 1200 Baud packet modem
To: ham-digital@ucsd.edu

I would like to build a small device that will send packets when a button is pushed or some other event like that.

To do this, I would need a small 1200 baud modem. Since this device will only

send unconnected packets, I don't need the entire AX.25 protocol in this device. I can hardcode the packet in an EPROM then send it when the button is pushed.

Does anyone know where I can find a schematic or information on a 1200 baud modem for this purpose?

Thanks
Jay
KA9OKT

Date: 2 Sep 1994 03:37:00 GMT
From: pa.dec.com!crl.dec.com!crl.dec.com!caen!math.ohio-state.edu!cs.utexas.edu!news.unt.edu!tcet.unt.edu!gjones@decwrl.dec.com
Subject: TAPR2 TNC Mods; Bit Regeneration?
To: ham-digital@ucsd.edu

Hi Mike - I think we answered all these on the NETSIG mailing list, but for those on the USENET feed thought I would also followup here.

The Signal Group (mikewood@mercury.interpath.net) wrote:
: 'I'm in the process of building and installing a 1200 baud bit
: regenerating full duplex packet repeater for the PacketCluster
: group in this area. (Yes I know you can repeat 1200 baud fairly
: reliably through a standard voice repeater, and we are already
: up and running in that mode with DCD control of the repeaters's
: PTT. For a number of reasons we will be changing over to bit
: regeneration.)
:
: It's been a real struggle finding info on how to modify a TAPR
: -2 clone TNC (MFJ-1270) for bit regeneration repeater operation.
: So far I've not found an already engineered solution.
:
: Heres what I have found:
:
:

...

: 2) I was told that the TAPR journals had several articles on
: 1200 baud bit regeneration mods for TAPR-2 clones. I purchased all
: of the TAPR back issues. Almost nothing regarding the subject
: was contained within them. Lot's of mention by people using
: packet rengerating repeaters (mostly 9600 baud) or advocating
: the use of them, but nothing in the way of how to mod a TAPR-2
: TNC for 1200 baud bit regeration.

Issue 45 page 17, Jan-92

Modifying the Kantronics DE-1200 for full-duplex repeater operations

Bdale Garbee, N3EUA

In addition we found the TNC-2a bit regen article in the 9th ARRL Computer Networking Conf, which TAPR now has in reprint.

Glad we were able to help you out Mike.

Cheers - Greg

President -- Tucson Amateur Packet Radio Corp

TAPR Office (817) 383-0000 | Internet: gjones@tenet.edu

Date: 2 Sep 1994 03:27:30 GMT

From: pa.dec.com!crl.dec.com!crl.dec.com!caen!zip.eecs.umich.edu!

yeshua.marcam.com!charnel.ecst.csuchico.edu!nic-nac.CSU.net!usc!cs.utexas.edu!

news.unt.edu!tcet.unt.edu!gjones@decwrl.dec

Subject: TNC-2 Source

To: ham-digital@ucsd.edu

Rudi van Drunen (rudi@chem.rug.nl) wrote:

: I'm desperately looking for the Z-80 SOURCE CODE for the TNC-2, as I want
: to build a Z-80 TNC with the new highly-integrated Z-80 KIO-chip which
: combines all peripherals into one chip. I have to modify the source for the
: location (addresses) of the peripherals.

TAPR does not own the rights to the source, therefore we don't have it posted anywhere. I checked with the office and they did not receive anything from you. Please note that the TAPR Fax number changed in January. (817) 566-2544 is the new fax number.

As another note - due to large number of requests we get daily, the office puts questions and requests from members on top. The TAPR office is only manned by one non-technical volunteer who handles all the various details of the TAPR organization.

: I scanned the internet, but with no success. The tapr disk
: seem only to contain the HEX-images for the firmware not the source. I faxed
: the TAPR directly, but got no response.

There are several possible sources for AX.25. The TexNet disk in the

TAPR library has a Z80 AX.25 implementation. PMP (Poor Mans Packet) has it in C. Eventually the new version of AX.25 2.2 will be released in C. Then there is an implementation in C in the various NOS packages. So - it is not hard to find examples.

Between all of those you should be able to find something useful. The ARRL will have available end of the year the 2.2 docs and SDL for review before adoption next year.

If you need the csurce for a commerical project, I will be glad to get you the necessary information in order to contact the authors of the TAPR TNC Source. Send me e-mail directly.

: Maybe some of you know the (internet) location of the source or do have the : source. If so, please share it with me ! thanks !!

Cheers - Greg

President -- Tucson Amateur Packet Radio Corp

TAPR Office (817) 383-0000 | Internet: gjones@tenet.edu

Date: Thu, 1 Sep 1994 22:15:51 GMT
From: news.cerf.net!gopher.sdsc.edu!news.tc.cornell.edu!news.cac.psu.edu!
howland.reston.ans.net!cs.utexas.edu!utnut!torn!uunet.ca!uunet.ca!cfcsc!
remote.cfcsc.dnd.ca!goobie@@ihnp4.ucsd.edu
To: ham-digital@ucsd.edu

References <172.1173.uupcb@moondog.com>, <Cv6svC.IAA@eskimo.com>,
<kb5rtk.42.2E62983A@rt66.com>news
Subject : Re: 1200/9600 Packet TNC

In article <kb5rtk.42.2E62983A@rt66.com> kb5rtk@rt66.com (Cliff Nail US - 227) writes:

>The new Kenwood TM-451A is really sweet for 440 9600 baud!

These radios very hard to get in Canada, have there been many available in the States.. Our 9600 bps network awaits some Kenwood 451 arrivals..

73
Keith
VE30Y@VA3BBS

End of Ham-Digital Digest V94 #294
